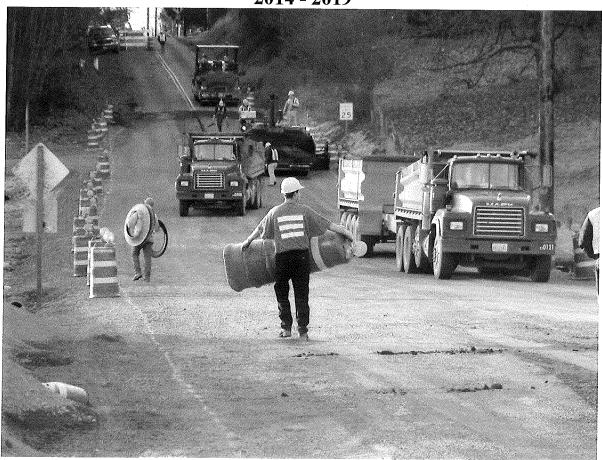
# **CITY OF KENT**

# **WASHINGTON**

# SIX YEAR TRANSPORTATION IMPROVEMENT PROGRAM

2014 - 2019



Mayor Suzette Cooke



Timothy J. LaPorte, PE, Director of Public Works

## **CITY OF KENT**

# SIX YEAR TRANSPORTATION IMPROVEMENT PROGRAM

## 2014 - 2019

#### **Table of Contents:**

- 1. Resolution adopting the 2014 2019 Six Year TIP
- 2. Introduction
- 3. Listing of the Projects
- 4. Project Descriptions
- 5. Map of the Projects
- 6. Contact Information

On the cover: Street Preservation project on 104th Avenue SE

# Resolution No. 1876

(Amending or Repealing Resolutions)

2014-2019 Six-Year Transportation Improvement Program Passed – 6/18/2013

# RESOLUTION NO. 1876

**A RESOLUTION** of the City Council of the City of Kent, Washington, adopting the 2014 through 2019 Six-Year Transportation Improvement Program.

#### **RECITALS**

- A. After proper notice, the City Council of the City of Kent held a public hearing at the regular meeting of the City Council at 7:00 p.m. on June 18, 2013, to consider public testimony on the City's proposed 2014 through 2019 Six-Year Transportation Improvement Program.
- B. Having considered public testimony to the plan, the Council would like to adopt the 2014 through 2019 Six-Year Transportation Improvement Program.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF KENT, WASHINGTON, DOES HEREBY RESOLVE AS FOLLOWS:

#### RESOLUTION

**SECTION 1.** - <u>Adoption</u>. The 2014 through 2019 Six-Year Transportation Improvement Program, set forth in Exhibit "A," which is attached and filed with City Clerk, is hereby adopted.

1 2014-2019 Six Year Transportation Improvement Program

rassed at a regular open public meeting by the City Council of the
City of Kent, Washington, this 18th day of June, 2013.
day of
CONCURRED in by the Mayor of the City of Kent this 18th day of
JUNE , 2013.
<u>JONE</u> , 2013.
$\sim$ $\sim$ $\sim$ 1
Junetle or the
SUZETTE COOKE, MAYOR
ATTEST:
1 1 LW mass
Lonald fr 11/0010, MMC
RONALD F MOORÉ, CITY CLERK
APPROVED AS TO FORM:
(
ADTINET TO ATTO ATTO CONTROL OF THE
ARTHUR PAT" FITZPATRICK, ACTING CITY ATTORNEY
I hereby certify that this is a true and correct copy of Resolution No.
Thereby certify that this is a true and correct copy of Resolution No.
1876 passed by the City Council of the City of Kent, Washington, the
18th day of June , 2013.
TITE MAN
peralog // son minc
RONALD F. MOORE, CITY CLERK
P \Civ\l\Resolution\SixYearTIP2019 docx

### SIX YEAR TRANSPORTATION IMPROVEMENT PROGRAM 2014 - 2019

### Introduction

#### **Overview**

The 2014-2019 Six-Year Transportation Improvement Program (TIP) is a short-range planning document that is updated annually based on needs and policies identified in the City's adopted Comprehensive Plan and 2008 Transportation Master Plan. It represents Kent's current list of needed projects that may begin work in the next six years. The document identifies secured or reasonably expected revenue sources for each of the projects. The Six-Year TIP serves as a draft work plan for the development of the local transportation network. Once adopted, the TIP helps to guide funding and implementation priorities during the development of the transportation portion of the Six -Year Capital Improvement Program (CIP). The CIP can be considered a subset of the TIP. The CIP shows the City-funded portion of projects and is constrained by current budget forecasts, whereas the TIP shows the complete project list with the variety of funding sources and partners involved.

#### Mandated by State Law

State law requires that each city develop a local TIP, that it be updated annually (RCW 35.77.010), and that it be submitted to the State Department of Transportation not more than thirty days after its adoption but before July 1st. It represents an important planning component under the state's Growth Management Act. For cities to compete for transportation funding grants from Federal and State sources, granting agencies require that projects be included in the TIP. The Six-Year Transportation Improvement Program may be revised at any time during the year by a majority of the Council, after a Public Hearing.

#### How is the 2014-2019 SIX-YEAR TIP different from the previous year?

PROJECTS ADDED	PROJECT TYPE	COMMENTS
#5 – Traffic Signal System Upgrade	Enhancement	Grant awarded @ 100%
#6 – Panther Lake Signal System	Enhancement	Grant awarded @ 100%
#16 - Willis/BNSF grade separation	Safety	Congestion/conflicts/coal trains
#17 - S 212 <sup>th</sup> /BNSF grade separation	Safety	Congestion/conflicts/coal trains
#19 - Willis/UPRR grade separation	Safety	Congestion/conflicts/coal trains
#20 - S 212 <sup>th</sup> /UPRR grade separation	Safety	Congestion/conflicts/coal trains
PROJECTS REMOVED		
Kent Kangley Road & 108 <sup>TH</sup> Ave	Operations	Combined with #21 - 108 <sup>th</sup> Ave SE
Intersection Improvements	Enhancement	Extension
Transit Now Partnership with King County	Transit	Combined with #43 – Community
Transit from 1 atmership with King County	Enhancement	Based Shuttles
OTHER		
#34 – Street Preservation	Maintenance	Now shows full estimated cost

Project Number	Project Name Project Location and Extent	
1.	Southeast 256 <sup>th</sup> Street Widening, Phase II SR 516 (Kent Kangley Road) to 116 <sup>th</sup> Avenue Southeast	
2.	Kent Kangley Road Pedestrian Safety Improvements 104 <sup>th</sup> Avenue SE to 124 <sup>th</sup> Avenue SE	
3.	South 228 <sup>th</sup> Street/Union Pacific Railroad Grade Separation  Grade separation crossing at Union Pacific Railroad	
4.	72 <sup>nd</sup> Avenue South Extension South 200 <sup>th</sup> Street to South 196 <sup>th</sup> Street	
5.	Traffic Control Signal System Citywide	
6.	Panther Lake Signal System Integration	
7.	Safe Routes to Schools Improvements at Horizon Elementary Horizon Elementary School, 27641 144 <sup>th</sup> Avenue SE	
8.	Safe Routes to Schools Improvements at Meridian Elementary Meridian Elementary School, 25621 140 <sup>th</sup> Avenue SE	
9.	Safe Routes to Schools Improvements at Meadow Ridge Elementary Meadow Ridge Elementary School, 27710 108 <sup>th</sup> Avenue SE	
10.	Kent Regional Trails Connector  Green River Trail to Interurban Trail at S 218 <sup>th</sup> St	
11.	James Street Bicycle Lanes Interurban Trail to Washington Avenue (SR 181) and 800 feet east of the Green River Trail	
12.	SE 208 <sup>th</sup> Street & 108 <sup>th</sup> Avenue SE (SR 515/Benson Highway) Intersection Improvements Intersection Operations Enhancement	

Project Number	Project Name Project Location and Extent		
13.	South 224 <sup>th</sup> Street Extension 84 <sup>th</sup> Avenue South to 104 <sup>th</sup> Avenue Southeast (SR 515/Benson Highway)		
14.	Central Avenue South Improvements Green River Bridge to East Willis Street (SR 516)		
15.	Willis Street and Central Avenue Intersection Improvements Intersection Operations Enhancement		
16.	Willis Street (SR 516)/Burlington Northern Santa Fe Railroad Grade Separation Grade separation crossing at Burlington Northern Santa Fe Railway		
17.	South 212 <sup>th</sup> Street/Burlington Northern Santa Fe Railroad Grade Separation Grade separation crossing at Burlington Northern Santa Fe Railway		
18.	Military Road South at Reith Road Intersection Operations Enhancement		
19.	Willis Street (SR 516)/Union Pacific Railroad Grade Separation Grade separation crossing at Union Pacific Railroad		
20.	South 212 <sup>th</sup> Street/Union Pacific Railroad Grade Separation Grade separation crossing at Union Pacific Railroad		
21.	108 <sup>th</sup> Avenue Southeast Extension Southeast Kent Kangley Road (SR 516) to Southeast 256 <sup>th</sup> Street		
22.	Smith Street and Central Avenue Intersection Improvement Intersection Operations Enhancement		
23.	S 212 <sup>th</sup> Street and 72 <sup>nd</sup> Avenue South Intersection Improvement Intersection Operations Enhancement		
24.	SE 240 <sup>th</sup> Street and 104 <sup>th</sup> Avenue SE (SR 515/Benson Highway) Intersection Improvement Intersection Operations Enhancement		

Project Number	Project Name Project Location and Extent
25.	Military Road South Widening South 272 <sup>nd</sup> Street to Kent-Des Moines Road (SR 516)
26.	132 <sup>nd</sup> Avenue Southeast Widening – Phase I Kent Kangley Road (SR 516) to Southeast 248 <sup>th</sup> Street
27.	132 <sup>nd</sup> Avenue Southeast Widening – Phase II Southeast 248 <sup>th</sup> Street to Southeast 240 <sup>th</sup> Street
28.	Kent Kangley Road (SR 516) and 132 <sup>nd</sup> Avenue SE Intersection Improvement Intersection Operations Enhancement
29.	South 260 <sup>th</sup> Street and Pacific Highway South (SR 99) Intersection Improvement Intersection Operations Enhancement
30.	SE 256 <sup>th</sup> Street and 104 <sup>th</sup> Avenue SE (SR 515/Benson Highway) Intersection Improvement Intersection Operations Enhancement
31.	South 212 <sup>th</sup> Street and 84 <sup>th</sup> Avenue South Intersection Improvement Intersection Operations Enhancement
32.	Meeker Street and Washington Avenue (SR 181) Intersection Improvement Intersection Operations Enhancement
33.	South 272 <sup>nd</sup> Street and Military Road Intersection Improvement Intersection Operations Enhancement

Project

**Project Name** 

Number

Project Location and Extent

#### **ONGOING CITYWIDE PROGRAMS**

34.	<b>Street Preservation Program</b>
	Ongoing Citywide Program

# 35. Residential Traffic Calming Program Ongoing Citywide Program

# **36.** Traffic Signal Management Program Ongoing Citywide Program

# **37.** Miscellaneous Intersection Improvements Ongoing Citywide Program

# **38.** Comprehensive Plan Update Ongoing Citywide Program

# **39.** Channelization (Street Markings) Improvement Program Ongoing Citywide Program

# **40.** Bicycle System Improvements Ongoing Citywide Program

# 41. Sidewalks, Sidewalk Repair and the Americans with Disabilities Act Compliance Program Ongoing Citywide Program

# **42.** Guardrail and Safety Improvements Ongoing Citywide Program

# **43.** Community Based Circulating Shuttles Ongoing Citywide Program

# **44.** Railroad Quiet Zone for Downtown Urban Center Ongoing Citywide Program

# Individual project and program descriptions

Pages 1 - 44

Abbreviations used in this section: CMAQ – Congestion Mitigation and Air Quality [Federal]; FAST – Freight Action Strategy for Everett-Seattle-Tacoma Corridor; FMSIB – Freight Mobility Strategic Investment Board [State], FTA – Federal Transit Administration [Federal]; HES – Hazard Elimination [Federal], ITS – Intelligent Transportation Systems [Federal]; LID –Local Improvement District; PWTF – Public Works Trust Fund Loan [State]; STP – Surface Transportation Program [Federal]; TIB – Transportation Improvement Board [State]

# This page intentionally left blank

YEAR:

2014

PROJECT #1:

Southeast 256<sup>th</sup> Street Widening, Phase II

SR 516 (Kent Kangley Road) to 116<sup>th</sup> Avenue Southeast

**DESCRIPTION:** 

Construct a three lane roadway from SR 516 (Kent Kangley Road) to 116<sup>th</sup> Avenue SE. This project includes bike lanes on both sides of the roadway. The project will include construction of full-width paving; concrete curbs, gutters, and sidewalks; street lighting; storm drainage;

landscaping; utilities; and appurtenances.

**PROJECT COST:** 

Preliminary Engineering ......\$1,100,000

Right of Way Acquisition .....\$350,000

Construction ......\$5,550,000

TOTAL.....\$7,000,000

**FUNDING SOURCE(S):** 

City of Kent, TIB

#### **PROJECT**

JUSTIFICATION:

Southeast 256th Street is a two-lane roadway with no curbs, gutters or sidewalks and a limited street light system. Despite the lack of suitable pedestrian facilities and extremely harsh weather in January 2012, over 650 pedestrians per day walked along this segment of roadway. During peak hours, the roadway cannot accommodate the traffic volumes due to the large number of vehicles blocking the roadway while waiting to turn left into driveways. The widening of Southeast 256<sup>th</sup> Street also alleviates traffic on SR 516 (Kent Kangley Road) as the two roads serve east/west travel demand. The project will increase the capacity of this roadway by adding a center two-way left turn lane. This project provides a multi-modal connection between improvements west and east of this

segment.

YEAR:

2014

PROJECT #2:

**Kent Kangley Pedestrian Safety Improvements** 

104th Avenue SE to 124th Avenue SE

**DESCRIPTION:** 

Add a new mid-block pedestrian crossing of Kent Kangley Road with median refuge island and Rectangular Rapid Flashing Beacons. Restripe crosswalks and stop bars, upgrade pedestrian crossings to countdown message modules and Americans with Disability Accessible (ADA) standard pedestrian push buttons. There are a total of 8 intersections that will be improved by this project and proper signage will be updated along the entire project length. This project also includes education and

enforcement elements.

**PROJECT COST:** 

Preliminary Engineering .....\$36,000

Education/Enforcement.....\$38,000

Construction ......\$342,000

TOTAL....\$416,000

**FUNDING SOURCE(S):** 

Washington State Department of Transportation

#### **PROJECT**

**JUSTIFICATION:** 

Kent Kangley Road (SR 516) is one of the most densely populated corridors in the City. The section from 104<sup>th</sup> Ave SE to 124<sup>th</sup> Ave SE is a congested, mixed land use, Principal Arterial that is a designated truck route currently operating at a Level of Service (LOS) E during the PM The majority of housing along this portion of SR 516 is high density multifamily housing that generates a substantial amount of pedestrian traffic. This section of Kent Kangley is a high boarding area for transit and is also a popular destination for senior citizens due to the high concentration of shopping facilities, banks, medical offices and senior housing. The project area includes two of the highest collision incident locations in the City (104th Avenue SE at 256th Street and 116th Avenue SE at Kent Kangley Road). The majority of collisions reported in the project area from 2006-2008 occurred during the daylight hours with pedestrians over the age of 18. This project will improve safety through the construction of these engineering improvements combined

with education and enforcement.

YEAR:

2014

PROJECT #3:

South 228th Street/Union Pacific Railroad Grade Separation

Grade Separation crossing at Union Pacific Railroad

**DESCRIPTION:** 

Construct grade separation of the Union Pacific Railroad mainline tracks at South 228<sup>th</sup> Street. The project will include the construction of a bridge; four-lane vehicle crossing; full-width paving; concrete curbs, gutters and sidewalks; street

lighting; utilities and appurtenances.

PROJECT COST:

Preliminary Engineering ......\$1,500,000

Right of Way Acquisition .....\$2,500,000

Construction .....\$21,000,000

TOTAL.....\$25,000,000

**FUNDING SOURCE(S):** 

City of Kent, Port of Seattle, FAST, FMSIB, LID, Union Pacific Railroad

#### **PROJECT**

JUSTIFICATION:

The project will lead to a seamless connection between major freight handlers and their primary destinations. This project will support freight moving through Kent to the Ports of Seattle and Tacoma, SeaTac Airport and the freeway system. Grade separating this arterial will increase roadway capacity, decrease congestion, enhance safety and improve freight mobility in this corridor and throughout the region. This project will provide regional connections for thousands of businesses, employers, and the 40 million square feet of warehouse/industrial space in the valley.

YEAR:

2014

PROJECT #4:

72<sup>nd</sup> Avenue South Extension

South 200th Street to South 196th Street

**DESCRIPTION:** 

This project completes a missing link by constructing a new three-lane roadway from South 200th Street to South 196th Street. The project will include the crossing of Mill Creek and construction of full-width paying; concrete curbs, gutters, sidewalks, street lighting, storm drainage.

landscaping, utilities and appurtenances.

PROJECT COST:

Preliminary Engineering .....\$250,000

Right of Way Acquisition .....\$75,000

Construction .....\$2,075,000

TOTAL.....\$2,400,000

**FUNDING SOURCE(S):** 

TIB, Regional Fire Authority, City of Kent

#### **PROJECT**

JUSTIFICATION:

Continued development in the northern Kent industrial area, and high levels of congestion along West Valley Highway between the South 180<sup>th</sup> Street and South 196th Street corridors, mandate additional north-south arterial capacity. This project provides some relief for South 180th Street, South 196<sup>th</sup> Street, and South 212<sup>th</sup> Street intersections along West Valley Highway. It also provides improved access to the South 196th Street corridor from industrial development along 72<sup>nd</sup> Avenue South by constructing the missing link between South 200th Street and South 196th Street. This roadway connection provides a direct link from the existing Fire Station on 72<sup>nd</sup> Avenue South to the 196<sup>th</sup> Street corridor, gradeseparated over both the BNSF and UPRR mainline railroad tracks, dramatically improving emergency response times to a large area of the Kent Manufacturing/Industrial Center and warehouse land uses.

YEAR:

2014

PROJECT #5:

**Traffic Control Signal System** 

Citywide

**DESCRIPTION:** 

The City will purchase and install a master signal controller unit capable of supporting flashing yellow left turn arrow (FYLTA) displays for permitted left turns. This project will also purchase and install traffic signal controllers for approximately 29 individual intersections. Traffic signals will be modified at approximately 14 intersections to display FYLTA signal indications for

permissive left turn movements.

PROJECT COST:

Preliminary Engineering ......\$80,000

Right of Way Acquisition .....\$0

Construction ......\$320,000

TOTAL....\$400,000

**FUNDING SOURCE(S):** 

Federal Highway Safety Improvement Program (HSIP)

#### **PROJECT**

JUSTIFICATION:

The current central traffic signal control system is not compatible with flashing yellow left turn arrow displays for permissive left turn movements. This type of signal display has been demonstrated to be much more readily understood by motorists and has resulted in reduced collision rates involving vehicles turning left during permissive left turn signal phases. The upgrade to the legacy central control system and more advanced intersection traffic signal controllers will allow greater operation flexibility and improved transportation system efficiency.

YEAR:

2014

PROJECT #6:

**Panther Lake Signal System Integration** 

**DESCRIPTION:** 

This project includes extension of communication cable to traffic signals in the recently annexed area of Panther Lake to allow remote monitoring and management of the traffic signals, replacement of the existing traffic signal controllers to be capable of displaying flashing yellow left turn arrow (FYLTA) for permissive left turn movements and allow flexible coordination of the traffic signals along arterial corridors.

**PROJECT COST:** 

Preliminary Engineering ......\$0

Right of Way Acquisition .....\$0

Construction ......\$342,000

TOTAL.....\$342,000

**FUNDING SOURCE(S):** 

2013 Quick Response Safety Program

Federal Highway Safety Improvement Program (HSIP)

#### **PROJECT**

JUSTIFICATION:

The traffic signals in the recently annexed area of Panther Lake are not connected to the City's central traffic signal control system; hence, they cannot be remotely monitored or managed from the City's Traffic Management Center. The intersection controllers are not capable of displaying flashing yellow left turn arrow (FYLTA) for permissive left turn movements. This type of signal display has been demonstrated to be much more readily understood by motorists and has resulted in reduced collision rates involving vehicles turning left during permissive left turn signal phases. The integration of these signals into the City's signal system will allow operation flexibility and improved transportation system efficiency

YEAR:

2014

PROJECT #7:

Safe Routes to Schools Improvements at Horizon Elementary School

27641 144th Avenue SE

**DESCRIPTION:** 

Install a paved pathway on the east side of 144<sup>th</sup> Avenue SE from SE 278<sup>th</sup> Street to SE 276<sup>th</sup> Place. Install a new midblock school crosswalk across 144th Avenue SE on the south side of the school driveway. Rectangular Rapid Flashing Beacons at the new crosswalk and install advance school crossing signs. This project also includes education and enforcement elements including the purchase of an additional Lidar Radar Unit for police enforcement.

**PROJECT COST:** 

Preliminary Engineering ......\$90,000

Right of Way Acquisition .....\$0

Construction ......\$220,000

TOTAL....\$310,000

**FUNDING SOURCE(S):** 

WSDOT, City of Kent

#### **PROJECT**

JUSTIFICATION:

The purpose of the Safe Routes to Schools Program is to encourage more students to walk and bicycle to and from school rather than being driven by their parents. Through a combination of engineering enhancements to the built environment plus education efforts aimed at the students and their parents, it is hoped that families will increase the number of walking

and biking trips they make to their local school.

YEAR:

2014

PROJECT #8:

Safe Routes to Schools Improvements at Meridian Elementary School

25621 140<sup>th</sup> Avenue SE

**DESCRIPTION:** 

Install a traffic signal at the intersection of SE 256<sup>th</sup> Street and 140<sup>th</sup> Avenue SE and construct an asphalt pavement walkway with an extruded curb along SE 256<sup>th</sup> Street from approximately 134<sup>th</sup> Avenue SE to 140<sup>th</sup> Avenue SE. The traffic signal includes a traffic surveillance camera and interconnect cable to connect this signal to the rest of the City's traffic control system. This project also includes education and enforcement elements including the purchase of an additional Lidar Radar Unit for the

police enforcement.

PROJECT COST:

Preliminary Engineering .....\$210,000

Right of Way Acquisition ......\$0

Construction ......\$625.000

TOTAL.....\$835,000

**FUNDING SOURCE(S):** 

WSDOT, City of Kent

#### PROJECT

JUSTIFICATION:

Meridian Elementary School is located near the intersection of SE 256<sup>th</sup> Street and 140<sup>th</sup> Avenue SE. The school provides adult crossing guards to help students cross SE 256<sup>th</sup> Street. The level of development in the area has increased to the point that local traffic in the neighborhood and in the communities to the east of the school has become especially heavy at the afternoon bell times. A full traffic signal would assist the crossing guards, the school children, the parents and teachers arriving/leaving the school and all the local motorists to maneuver in an orderly way during times of heavy conflict. Currently students must walk or bike along a wide shoulder on SE 256<sup>th</sup> Street. This project would provide an asphalt walking path which would be separated from the roadway by a raised curb providing clearly delineated locations for pedestrians, bicyclists and motorists.

YEAR:

2014

PROJECT #9:

Safe Routes to Schools Improvements at Meadow Ridge Elementary

School

27710 108<sup>th</sup> Avenue SE

**DESCRIPTION:** 

Install a 6 foot concrete sidewalk with curb and gutter along the west side of 108<sup>th</sup> Avenue SE from SE 273<sup>rd</sup> Street to SE 272<sup>nd</sup> Street. Install a 6 foot concrete sidewalk with curb and gutter along the south side of SE 272<sup>nd</sup> Street from 108<sup>th</sup> Avenue SE to 105<sup>th</sup> Avenue SE. This project will install a new crosswalk crossing 108<sup>th</sup> Avenue SE with Rectangular Rapid Flashing Beacons and appropriate signage on the north side of the onramp to the westbound 277<sup>th</sup> Street Corridor. This project also includes education and enforcement elements including the purchase of an additional Lidar Radar Unit for police enforcement.

**PROJECT COST:** 

Preliminary Engineering .....\$175,000

Education/Enforcement.....\$20,000

Construction ......\$425,000

TOTAL.....\$620,000

**FUNDING SOURCE(S):** 

WSDOT, City of Kent

#### **PROJECT**

JUSTIFICATION:

Few students currently walk or bicycle to Meadow Ridge Elementary School. The Kent School District provides bus transportation for all students living west of 108<sup>th</sup> Avenue South and for students living north of the school. This project will make the pedestrian environment friendlier for all users and make it an inviting alternative for parents and students to choose. The City of Kent has a number of programs that encourage people of all ages to live a more active lifestyle and makes it a City priority to provide attractive walking and bicycling facilities. Once these additional sidewalk facilities are built and the new crosswalk across 108<sup>th</sup> Avenue SE with Rectangular Rapid Flashing Beacons is installed, it is anticipated that many more families will be encouraged to walk their children to Meadow Ridge rather than drive them to school.

YEAR:

2014

PROJECT #10:

**Kent Regional Trails Connector** 

Green River Trail to Interurban Trail at South 218th Street

DESCRIPTION:

Construct 4,400 foot multi-use trail connecting the Green River and Interurban Regional Trails at a point approximately mid-way between the South 212th Street and South 228th Street Corridors at about South 218th Street in the heart of the Kent Valley. This 12-foot wide multi-use trail for non-motorized users will include trail lighting to enhance visibility and encourage year round usage. Rectangular Rapid Flashing Beacons and marked crosswalks will be installed where the new trail crosses midblock at 64th Avenue South and 72nd Avenue South. A traffic signal for pedestrians and bicyclists crossing mid-block will be installed on 68th Avenue South (aka West Valley Highway/SR 181). A mechanism for performance monitoring (counting) will be installed at or near the new traffic signal. The project will install a steel pedestrian/bicycle bridge over the Mill Creek between 72<sup>nd</sup> Avenue South and the Interurban Trail.

**PROJECT COST:** 

Preliminary Engineering ......\$125,000

Right of Way Acquisition .....\$0

Construction ......\$1,175,000

TOTAL.....\$1,300,000

**FUNDING SOURCE(S):** 

CMAQ, WSDOT, City of Kent

#### **PROJECT**

JUSTIFICATION:

One of the highest priority projects in the City's Non-Motorized Plan and Transportation Master Plan, this new trail would fill a missing east/west link in the city's and the region's bicycle network. It would connect two of the most heavily used regional trails to each other and provide access for tens of thousands of people to a concentrated employment center. It would provide alternative mode access to The Kent Manufacturing/Industrial Center's 1,800 employers, to recreational activities along the Green River and the Green River Natural Resources Area and provide additional safety for all users crossing three major arterial streets in an area with a heavy mix of truck traffic.

YEAR:

2014

PROJECT #11:

**James Street Bicycle Lanes** 

Interurban Trail to Washington Avenue (SR 181) and 800 feet east of the

Green River Trail

**DESCRIPTION:** 

Install bike lanes along James Street from the Interurban Trail to Washington Avenue South (SR 181). This project will also eliminate the gap of approximately 800 feet at the west end of South 240<sup>th</sup> Street where

it intersects with the Green River Trail.

**PROJECT COST:** 

Preliminary Engineering ......\$150,000

Right of Way Acquisition .....\$0

Construction .....\$1,225,000

TOTAL.....\$1,375,000

**FUNDING SOURCE(S):** 

STP, City of Kent

#### **PROJECT**

JUSTIFICATION:

The proposed bicycle lanes would complete a missing bicycle link between the Green River Trail and the Kent Regional Growth Center. This project would provide the first dedicated bicycle lanes to penetrate what had here-to-for been a barrier to east/west bicycle travel, State Route 167. Bike lanes currently extend easterly from this point providing connections to the King County Regional Justice Center, Kent Station (an 18-acre shopping and entertainment complex), and the Kent Transit Center. Nearby land uses include historic downtown Kent, City Hall and the Kent City Center project scheduled to add 164 urban-style apartments to the downtown core starting in 2014. Filling in the missing links of this bicycle corridor is expected to encourage more people to utilize bicycling for more of their trips. The anticipated mode shift from single-occupant vehicle to bicycle will allow Kent to meet growth management goals while continuing to comply with its adopted level of service standards and federal clean air standards.

#### **CITY OF KENT**

# SIX YEAR TRANSPORTATION IMPROVEMENT PROGRAM

YEAR:

2014

PROJECT #12:

SE 208th Street and 108th Avenue SE (SR 515/Benson Highway)

**Intersection Improvement** 

Intersection Operations Enhancement

**DESCRIPTION:** 

Add dual southbound left storage lane on 108th Avenue SE, widen the

receiving lane on SE 208<sup>th</sup> St, and modify the signal phasing.

**PROJECT COST:** 

Preliminary Engineering .....\$60,000

Right of Way Acquisition .....\$75,000

Construction ......\$575,000

TOTAL.....\$710,000

**FUNDING SOURCE(S):** 

City of Kent, WSDOT (Highway Safety Improvement Program)

#### **PROJECT**

JUSTIFICATION:

State Route 515, also known as The Benson Highway or 108<sup>th</sup> Avenue SE, is the primary north south route on the East Hill and serves as a major transit route. With four to five lanes in its current configuration, this roadway has been widened to its practical limits. Improvements to intersections along the corridor can have positive effects on corridor congestion and improve efficiency. This project would add queuing capacity for the southbound left turn movement while continuing to provide two lanes of through travel.

YEAR:

2014

PROJECT #13:

South 224th Street Extension

84th Avenue South to 104th Avenue Southeast (SR 515/Benson Highway)

**DESCRIPTION:** 

Construct a three-lane road from 84<sup>th</sup> Avenue South to 104<sup>th</sup> Avenue Southeast (SR 515/Benson Highway), including new bridges over SR 167 and Garrison Creek. The project will include the construction of full-width paving; concrete curbs, gutters and sidewalks; street lighting; storm drainage; landscaping; utilities and appurtenances.

PROJECT COST:

Preliminary Engineering .....\$3,000,000

Right of Way Acquisition ......\$4,000,000

Construction .....\$22,000,000

TOTAL.....\$29,000,000

**FUNDING SOURCE(S):** 

City of Kent, LID, TIB

#### **PROJECT**

**JUSTIFICATION:** 

The existing roadway system cannot accommodate the current or forecast east-west traffic volumes between Kent's East Hill and the Green River Valley floor. In order to meet transportation concurrency requirements of the Growth Management Act, additional east-west vehicle capacity is required. Intersections along South 208<sup>th</sup>/212<sup>th</sup> Street and James/Southeast 240<sup>th</sup> Streets are also at or over capacity. It is not feasible to widen the James/Southeast 240<sup>th</sup> Street and South 208<sup>th</sup>/212<sup>th</sup> Street 'corridors' enough to accommodate forecast traffic volumes without additional east-west capacity because of existing development and topographic constraints.

YEAR:

2015

PROJECT #14:

**Central Avenue South Improvements** 

Green River Bridge to East Willis Street (SR 516)

**DESCRIPTION:** 

Remove and rehabilitate the existing roadway pavement to add service life to the roadway, between the Green River Bridge and East Willis Street (SR 516). This project will include the removal and replacement of failing pavement sections and a full-width asphalt concrete overlay of the entire roadway. Also included in this project is the selective replacement of curbs, gutters, sidewalks and street trees, as well as minor storm drainage improvements.

**PROJECT COST:** 

 Preliminary Engineering
 \$500,000

 Right of Way Acquisition
 \$0

 Construction
 \$4,000,000

 TOTAL
 \$4,500,000

**FUNDING SOURCE(S):** 

STP, City of Kent

#### PROJECT

JUSTIFICATION:

The existing pavement along this section of Central Avenue South is exhibiting signs of distress, as demonstrated by "alligatoring", longitudinal cracking, and cracking of the curbs and gutters. The service life of this roadway has been reached, necessitating reconstruction of the roadway. The sidewalk system is sub-standard in many locations and in need of replacement.

YEAR:

2015

PROJECT #15:

Willis Street and Central Avenue Intersection Improvements

Intersection Operations Enhancement

**DESCRIPTION:** 

Improve the intersection of Willis Street and Central Avenue to provide a right turn lane from southbound on Central Avenue to westbound Willis Street. Project includes sidewalk, curb and gutter replacement and improvements to traffic signal

system.

**PROJECT COST:** 

Preliminary Engineering ......\$40,000

Right of Way Acquisition .....\$150,000

Construction ......\$260,000

TOTAL.....\$450,000

**FUNDING SOURCE(S):** 

City of Kent, Developer Mitigation

#### **PROJECT**

**JUSTIFICATION:** 

This project is a traffic mitigation requirement for additional trips generated by

the Kent Station Development. The City of Kent will be implementing this

project that is required of the developer.

YEAR:

2015

PROJECT #16:

Willis Street (SR 516)/Burlington Northern Santa Fe Railroad Grade

Separation

Grade Separation Crossing at Burlington Northern Santa Fe Railway

**DESCRIPTION:** 

Construct grade separation at the Burlington Northern Santa Fe Railway mainline tracks at Willis Street (SR 516). The project will include the construction of a bridge; four-lane vehicle crossing; full width paving; concrete curbs, gutters, and

sidewalks; street lighting; utilities and appurtenances.

**PROJECT COST:** 

Preliminary Engineering .....\$2,500,000

Right of Way Acquisition .....\$3,000,000

Construction ......\$21,500,000

TOTAL....\$27,000,000

FUNDING SOURCE(S): City of Kent, Burlington Northern Santa Fe Railway, FAST,

FMSIB, Port of Seattle, TIB

#### **PROJECT**

JUSTIFICATION:

This project supports east/west freight and commuter mobility in the Green River Valley. More than 26,000 vehicles per day travel on Willis Street, including over 800 freight-bearing trucks. The level of freight and passenger rail traffic on the BNSF Railway mainline is also increasing to approximately 45 trains a day plus the possibility of another 18 coal trains. Grade separation provides more efficient movements of goods and provides a solution to the costly problem of congestion. The railroad crossing will no longer impede freight and other traffic Reduction in traffic congestion on adjoining streets and reduced environmental impacts caused by traffic congestion is expected. This projection will enhance Kent as an economic generator and provide regional connections for thousands of businesses, employers, and commuters.

YEAR:

2015

**PROJECT #17:** 

South 212<sup>th</sup> Street/Burlington Northern Santa Fe Railroad Grade

Separation

Grade Separation Crossing at Burlington Northern Santa Fe Railway

**DESCRIPTION:** 

Construct grade separation at the Burlington Northern Santa Fe Railway mainline tracks at South 212<sup>th</sup> Street. The project will include the construction of a bridge; six-lane vehicle crossing; full width paving; concrete curbs, gutters, and

sidewalks; a bicycle facility; street lighting; utilities and appurtenances.

**PROJECT COST:** 

Preliminary Engineering ......\$3,500,000

Right of Way Acquisition .....\$1,500,000

Construction ......\$30,000,000

TOTAL .....\$35,000,000

**FUNDING SOURCE(S):** 

City of Kent, FMSIB, FAST, TIB, Burlington Northern Santa Fe

Railway

#### **PROJECT**

**JUSTIFICATION:** 

This project supports east-west freight and commuter mobility in the Green River Valley. Approximately 29,000 vehicles per day travel on South 212<sup>th</sup> Street, including nearly 3,500 freight-bearing trucks. The level of freight and passenger rail traffic on the BNSF Railway mainline is also increasing to approximately 45 trains per day plus the likelihood of another 18 coal trains. Grade separation provides more efficient movement of goods and provides a solution to the costly problem of congestion. The railroad crossing will no longer impede freight and other traffic flow. Reduction in traffic congestion on adjoining streets and reduced environmental impacts caused by traffic congestion is expected. This project will enhance Kent as an economic generator and provide regional connections for thousands of businesses, employers and commuters.

YEAR:

2016

**PROJECT #18:** 

Military Road South at Reith Road Intersection Operations Enhancement

**DESCRIPTION:** 

Widen all approaches of Military Road South at Reith Road intersection to provide exclusive left turn lanes for each approach, and exclusive right turn lanes for northbound and southbound traffic on Military Road South and westbound traffic on Reith Road. Replace the existing traffic signal. The project will include the construction of full width paving, paved shoulders, street lighting, storm drainage, utilities and appurtenances. The intersection will accommodate the future bicycle lanes which are planned for both Military Road South and Reith Road.

**PROJECT COST:** 

 Preliminary Engineering
 \$180,000

 Right of Way Acquisition
 \$200,000

 Construction
 \$1,800,000

 TOTAL
 \$2,180,000

**FUNDING SOURCE(S):** 

TIB, City of Kent, Development Mitigation Funds

#### **PROJECT**

JUSTIFICATION:

The level of development on the Kent West Hill coupled with the growth in the Puget Sound area and the regularly occurring congestion along both Pacific Highway South and Interstate 5 results in significant congestion at this intersection in the morning and evening peak hours.

YEAR:

2016

PROJECT #19:

Willis Street (SR516)/Union Pacific Railroad Grade Separation

Grade Separation Crossing at Union Pacific Railroad

**DESCRIPTION:** 

Construct grade separation of the Union Pacific Railroad's mainline tracks at Willis Street (SR 516). The project will include the construction of a bridge; a four-lane roadway; full width paving; concrete curbs, gutters, and sidewalks;

street lighting; utilities and appurtenances.

**PROJECT COST:** 

Preliminary Engineering .....\$2,000,000

Right of Way Acquisition .....\$0

Construction ......\$18,000,000

TOTAL.....\$20,000,000

**FUNDING SOURCE(S):** 

City of Kent, FAST, FMSIB, Port of Seattle, TIB, Union Pacific Railroad

#### PROJECT

**JUSTIFICATION:** 

This project supports east-west freight and commuter mobility in the Green River Valley. More than 26,000 vehicles per day travel on Willis Street, including over 800 freight-bearing trucks. The level of freight traffic on the UP Railroad mainline is also increasing to approximately 20 trains a day. Grade separations provide a solution to the costly problem of congestion. The railroad crossing will no longer impede freight and other traffic flow. Reductions in traffic congestion on adjoining streets and reduced environmental impacts caused by traffic congestion are also expected. This project will enhance Kent as an economic generator and provide regional connections for thousands of businesses, employers, and commuters.

YEAR:

2016

PROJECT #20:

South 212<sup>th</sup> Street/Union Pacific Railroad Grade Separation

Grade Separation Crossing at Union Pacific Railroad

**DESCRIPTION:** 

Construct grade separation of the Union Pacific Railroad's mainline tracks at South 212th Street. The project will include the construction of a bridge; a sixlane vehicle crossing; full-width paving; concrete curbs, gutters, and sidewalks; a

bicycle facility; street lighting; utilities and appurtenances.

PROJECT COST:

Preliminary Engineering .....\$3,000,000

Right of Way Acquisition ......\$1,500,000

Construction ......\$25,500,000

TOTAL .....\$30,000,000

**FUNDING SOURCE(S):** 

City of Kent, FMSIB, FAST, TIB, Union Pacific Railroad

#### **PROJECT**

JUSTIFICATION:

This project supports east-west freight and commuter mobility in the Green River Valley. Approximately 29,000 vehicles per day travel on South 212th Street, including nearly 3,500 freight bearing trucks. The level of freight traffic on the UP Railroad mainline is also increasing to approximately 20 trains a day. Grade separations provide a solution to the costly problem of congestion. The railroad crossing will no longer impede freight and other traffic flow. Reduction in traffic congestion on adjoining streets and reduced environmental impacts caused by traffic congestion is also expected. This project will enhance Kent as an economic generator and provide regional connections for thousands of businesses, employers, and commuters.

YEAR:

2017

PROJECT #21:

108th Avenue Southeast Extension

Southeast Kent Kangley Road (SR 516) to Southeast 256<sup>th</sup> Street

**DESCRIPTION:** 

Construct a new three lane roadway from Southeast Kent Kangley Road (SR 516) to Southeast 256<sup>th</sup> Street including rebuilding the traffic signals at the intersection of Southeast Kent Kangley Road and 108<sup>th</sup> Avenue Southeast and installing one new traffic signal at the intersection of Southeast 256<sup>th</sup> Street and 109<sup>th</sup> Avenue Southeast and replacing the traffic signal at Kent Kangley Road and 108<sup>th</sup> Avenue SE. The project includes right turn lanes northbound on 109<sup>th</sup> at Southeast 256<sup>th</sup> Street and Southbound on 109<sup>th</sup> at Kent Kangley Road. The project will also include construction of full width paving; concrete curbs, gutters and sidewalks; Sharrows; street lighting; storm drainage; landscaping; utilities and appurtenances. As part of this project, the eastbound left-turn lane from Kent Kangley Road to Southeast 256<sup>th</sup> Street will be eliminated.

PROJECT COST:

Preliminary Engineering ......\$300,000

Right of Way Acquisition .....\$2,100,000

Construction ......\$2,800,000

TOTAL.....\$5,200,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

This project will relieve congestion at the Y intersection of 104<sup>th</sup> Avenue Southeast (Benson Highway) (SR 515)/Kent Kangley Road (SR 516)/Southeast 256<sup>th</sup> Street by improving the traffic flow along SR 516. It will eliminate the left turn pocket from SR 516 to Southeast 256<sup>th</sup> Street and redirect that traffic along SR 516 to 108<sup>th</sup> Avenue Southeast. There will be a new left turn pocket constructed for motorists wishing to travel north on 108<sup>th</sup> Avenue Southeast to Southeast 256<sup>th</sup> Street. By moving these left turning movements further to the east, away from the congested Y intersection, all directions of traffic will be able to flow more efficiently.

YEAR:

2018

PROJECT #22:

Smith Street and Central Avenue Intersection Improvement

Intersection Operations Enhancement

**DESCRIPTION:** 

Revise southbound and northbound turn lane assignment.

PROJECT COST:

Preliminary Engineering .....\$100,000

Right of Way Acquisition .....\$400,000

Construction ......\$900,000

TOTAL.....\$1,400,000

**FUNDING SOURCE(S):** 

City of Kent

#### PROJECT

JUSTIFICATION:

The southbound vehicle movement is heaviest in the afternoon peak period. The predominant vehicle flow in the peak period is southbound on Central Avenue and then left on Smith Street to proceed eastbound up the hill. This revision in lane configuration, queue capacity, and turning capacity reduces congestion. This project could reduce the intersection delay in the afternoon peak period from 167 seconds per vehicle to 111

seconds per vehicle.

YEAR:

2018

PROJECT #23:

S 212<sup>th</sup> Street and 72<sup>nd</sup> Avenue South Intersection Improvement

Intersection Operations Enhancement

**DESCRIPTION:** 

Add southbound dual left turn lanes and restripe northbound lane

configuration.

**PROJECT COST:** 

Preliminary Engineering ......\$60,000

Right of Way Acquisition .....\$125,000

Construction ......\$505,000

TOTAL.....\$690,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

Kent is an important freight distribution center in the Puget Sound Region. The efficient movement of freight, through and within the City is critical to Kent's economic health. With the completion of the final road segment of 72<sup>nd</sup> Avenue South between South 196<sup>th</sup> Street and South 200<sup>th</sup> Street, 72<sup>nd</sup> Avenue South becomes a key freight corridor and this intersection of two important freight corridors (72<sup>nd</sup> Ave S and S 212<sup>th</sup> Street) takes on a highly significant role in relieving the congestion often found on West Valley Highway at peak periods. This improvement reduces future southbound vehicle queuing and congestion and has the potential to improve intersection delay from 193 seconds per vehicle to

63 seconds per vehicle.

YEAR:

2018

PROJECT #24:

SE 240<sup>th</sup> Street and 104<sup>th</sup> Avenue SE (SR 515/Benson Highway)

**Intersection Improvement** 

Intersection Operations Enhancement

**DESCRIPTION:** 

Add dual northbound and southbound left turn lanes. Add southbound

right turn pockets. Modify signal phasing.

**PROJECT COST:** 

Preliminary Engineering .....\$120,000

Right of Way Acquisition .....\$275,000

Construction .....\$1,205,000

TOTAL.....\$1,600,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

104th Avenue SE (SR 515, also known as The Benson Highway), is the primary north south route on the East Hill and serves as a major transit route. With four to five lanes in its current configuration, this roadway has been widened to its practical limits. Improvements to intersections along the corridor can have positive effects on corridor congestion and improve efficiency. This project would add queuing capacity for both the northbound and southbound left turn movements while continuing to provide two lanes of through travel. It could reduce the intersection delay in the afternoon peak period from an average 110 seconds per vehicle to about 56 seconds per vehicle.

YEAR:

2019

PROJECT #25:

Military Road South Widening

South 272<sup>nd</sup> Street to Kent-Des Moines Road (SR 516)

**DESCRIPTION:** 

This project will widen Military Road from South 272<sup>nd</sup> Street to Kent-Des Moines Road adding a center left-turn lane, bicycle lanes, curb, gutter Also included is the construction of storm drainage improvement and illumination system improvements. (Note: The Reith Road intersection is a separate project and is not included in this project.)

**PROJECT COST:** 

Preliminary Engineering .....\$2,000,000

Right of Way Acquisition .....\$1,000,000

Construction ......\$15,500,000

TOTAL.....\$18,500,000

**FUNDING SOURCE(S):** 

City of Kent, Development Mitigation Funds, TIB

#### **PROJECT**

JUSTIFICATION:

The level of development along this section of Military Road South has reached a point where a separate center two-way left turn lane is required. During peak traffic flow hours, the roadway cannot accommodate the traffic volumes due to the large number of vehicles blocking the roadway waiting to make left turns. Most sections of Military Road are lacking

sidewalks and an adequate storm drainage system.

YEAR:

2019

PROJECT #26:

132<sup>nd</sup> Avenue Southeast Widening – Phase I

Kent Kangley Road (SR 516) to Southeast 248th Street

**DESCRIPTION:** 

Widen 132<sup>nd</sup> Avenue Southeast to provide a five lane roadway, including four general purpose travel lanes, a center left-turn lane, and a facility for bicycle travel; modifying the existing traffic signal systems at the intersections of Kent Kangley Road and Southeast 256<sup>th</sup> Street. The project will include the construction of full-width paving; bicycle lanes; concrete curbs, gutters and sidewalks; street lighting; storm drainage;

utilities; and appurtenances.

PROJECT COST:

Preliminary Engineering ......\$3,800,000

Right of Way Acquisition .....\$3,100,000

Construction ......\$18,200,000

TOTAL.....\$25,100,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

The level of development along this section of 132<sup>nd</sup> Avenue has already reached the point whereby a consistent five land roadway section is needed to provide efficient left-turn access into adjoining properties and accommodate forecast traffic volumes. Existing traffic volumes that exceed 14,000 ADT (near the intersection of 132<sup>nd</sup> Avenue southeast and Kent Kangley Road) necessitate a five lane section. Sidewalks and bicycle facilities will provide multimodal access to adjacent land uses.

YEAR:

2019

PROJECT #27:

132<sup>nd</sup> Avenue Southeast Widening – Phase II

Southeast 248th Street to Southeast 240th Street

**DESCRIPTION:** 

Widen 132<sup>nd</sup> Avenue Southeast to provide a five lane roadway, including four general purpose travel lanes, a center left-turn lane, and a bicycle facility; modifying the existing traffic signal system at the intersection of Southeast 240<sup>th</sup> Street. The project will include the construction of full-width paving; bicycle lanes; concrete curbs, gutters, and sidewalks; street

lighting; storm drainage; utilities and appurtenances.

**PROJECT COST:** 

Preliminary Engineering ......\$750,000

Right of Way Acquisition .....\$1,500,000

Construction .....\$4,750,000

TOTAL.....\$7,000,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

The level of development along this section of 132<sup>nd</sup> Avenue has already reached the point whereby a consistent five lane roadway section is needed to provide efficient left-turn access to adjoining properties and accommodate forecast traffic volumes. Sidewalks and bicycle facilities will provide multimodal access to adjacent land uses.

YEAR:

2018

PROJECT #28:

Kent Kangley Road (SR 516) and 132nd Avenue SE Intersection

**Improvement** 

Intersection Operations Enhancement

**DESCRIPTION:** 

Add northbound and southbound dual left turn lanes.

**PROJECT COST:** 

Preliminary Engineering ......\$85,000

Right of Way Acquisition .....\$175,000

Construction ......\$940,000

TOTAL.....\$1,200,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

Kent Kangley Road (SR 516) is a Principal Arterial with over 32,000 daily vehicle trips. 132<sup>nd</sup> Avenue SE is a Minor Arterial with over 14,000 daily vehicle trips. The demand on both roads is anticipated to grow in the next decade as growth in households and jobs on Kent's East Hill continues to develop. Over the next 20 years the growth of traffic on 132<sup>nd</sup> Avenue is projected to grow at an average rate of 0.8% per year. This means the demand on the roadway would be 15% higher by 2033. The intersection of these two key roadways becomes a chokepoint for both local and regional commuters. This improvement reduces existing and future southbound congestion. It has the potential to reduce the intersection delay from 109 seconds per vehicle to 44 seconds per vehicle.

**YEAR:** 

2019

PROJECT #29:

South 260th Street and Pacific Highway South (SR 99) Intersection

**Improvement** 

Intersection Operations Enhancement

**DESCRIPTION:** 

Add westbound dual left turn lanes. Add eastbound right turn pocket.

Modify signal phasing.

**PROJECT COST:** 

Preliminary Engineering ......\$100,000

Right of Way Acquisition .....\$250,000

Construction ......\$900,000

TOTAL.....\$1,250,000

**FUNDING SOURCE(S):** 

City of Kent

#### PROJECT

JUSTIFICATION:

S 260<sup>th</sup> Street provides one of the few direct connections between the Pacific Highway corridor and the downtown City Core. South 260th is a multimodal corridor which accommodates vehicles, pedestrians, bicyclists and bus traffic. As the Midway area redevelops into a more commercial/residential mixed-use zone, the traffic connections to the Military Road neighborhood and connections to the valley retail and civic center need to be updated to highest efficiency. This intersection improvement reduces future westbound vehicle queuing and congestion of over 500 vehicles per hour and improves the intersection delay from 180 seconds per vehicle (3 minutes) to approximately 87 seconds per vehicle in the PM Peak Period.

YEAR:

2019

PROJECT #30:

SE 256<sup>th</sup> Street and 104<sup>th</sup> Avenue SE (SR 515/Benson Highway)

**Intersection Improvement** 

Intersection Operations Enhancement

DESCRIPTION:

Add northbound right turn lane. Modify signal phasing.

**PROJECT COST:** 

Preliminary Engineering .....\$80,000

Right of Way Acquisition .....\$150,000

Construction ......\$220,000

TOTAL.....\$450,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

At the confluence of two state highways (SR 516 and SR 515) this intersection experiences congestion during most times of the day. Approximately 33,000 daily vehicle trips are traveling east/west on SR 516 (Kent Kangley) where it meets SE 256<sup>th</sup> Street and 104<sup>th</sup> Avenue SE at what is commonly known as the Kent Kangley "Y". To help facilitate the northbound movement at this intersection, this project will provide a dedicated right turn lane for traffic flowing eastbound. This project also provides some signal improvements (upgrades) to allow changes to the signal timing and phasing at this intersection. The combined improvements are estimated to reduce delay on the northbound segment from 156 seconds per vehicle to 86 seconds per vehicle in the peak period.

YEAR:

2019

PROJECT #31:

South 212th Street and 84th Avenue South Intersection Improvement

Intersection Operations Enhancement

**DESCRIPTION:** 

Extend eastbound left turn lane and add northbound and southbound dual

left turn lanes. Modify signal phasing.

**PROJECT COST:** 

Preliminary Engineering ......\$130,000

Right of Way Acquisition .....\$420,000

Construction ......\$1,250,000

TOTAL.....\$1,800,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

This intersection experiences congestion during most times of the day. Both roads are Principal Arterials and each carries over 25,000 vehicle trips per day. The demand on both of these roads is expected to grow in the next decade as growth in both freight movement and residential development in Kent's valley continues to develop. This project also provides some signal improvements (upgrades) to allow changes to the signal timing and phasing of this intersection. The improvements would reduce congestion because of heavy demand for left turn movements. It is anticipated that these improvements could reduce the intersection delay

to as little as 47 seconds per vehicle.

YEAR:

2019

PROJECT #32:

Meeker Street and Washington Avenue Intersection Improvement

Intersection Operations Enhancement

**DESCRIPTION:** 

Add eastbound and westbound right turn pockets. Extend left turn storage

pockets. Modify signal phasing.

**PROJECT COST:** 

Preliminary Engineering ......\$60,000

Right of Way Acquisition .....\$350,000

Construction ......\$550,000

TOTAL.....\$960,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

**JUSTIFICATION:** 

This is one of the busiest intersections in the City. Washington Avenue (SR 181) is a Principal Arterial and Meeker Street is a Minor Arterial. Washington Avenue carries about 25,000 vehicle trips per day and Meeker carries about 16,000 vehicle trips per day at this location. Much of the vehicle volume on Washington Avenue is truck trips headed for the regional highways and the Ports of Seattle and Tacoma. At the same time, internal automobile, bicycle, and pedestrian traffic between the west side of Kent and the Downtown City Center needs to maneuver through this busy intersection. These improvements will have the greatest effect on improving the efficiency of that east/west movement. It is anticipated that these improvements could reduce the intersection delay to as little as

57 seconds per vehicle.

YEAR:

2019

PROJECT #33:

South 272<sup>nd</sup> Street and Military Road Intersection Improvement

Intersection Operations Enhancement

**DESCRIPTION:** 

Add a southbound through lane at the intersection. Modify signal phasing.

PROJECT COST:

Preliminary Engineering .....\$20,000

Right of Way Acquisition .....\$0

Construction ......\$240,000

TOTAL.....\$260,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

The increased development on the Kent West Hill combined with the lack of alternative north/south arterials places significant local congestion on Military Road. On those occasions when the State Highway System (I-5 and/or State Route 99, aka Pacific Highway South) breaks down, Military Road becomes the alternative of choice for regional diversion traffic. This project reduces existing and future southbound congestion.

YEAR:

2014 - 2019

PROJECT #34:

**Street Preservation Program** 

Ongoing Citywide Program

**DESCRIPTION:** 

Projects that maintain the existing transportation system by overlaying,

rehabilitating, and reconstructing the existing asphalt and concrete streets

throughout the City.

**PROJECT COST:** Preliminary Engineering ..........\$4,000,000

Right of Way Acquisition .....\$0

Construction .....\$56,000,000

TOTAL.....\$60,000,000

**FUNDING SOURCE(S):** 

City of Kent

#### PROJECT

**JUSTIFICATION:** 

The City assessed the condition of its street network in 2011. It was found that many of the streets exhibit deficiencies that reflect they are beyond their expected performance life and in need of a maintenance or rehabilitation overlay, or some amount of reconstruction. Moreover, historically, the amount of pavement resurfacing, rehabilitation, and reconstruction monies the City has budgeted each year has been insufficient to address the deficiencies of its street network. Insufficient budgets to perform this necessary work results in more expensive maintenance and rehabilitation options.

YEAR:

2014 - 2019

PROJECT #35:

**Residential Traffic Calming Program** 

Ongoing Citywide Program

**DESCRIPTION:** 

This project will develop and implement residential traffic calming throughout the

City on a priority basis as funding allows.

**PROJECT COST:** 

Preliminary Engineering ......\$750,000

Right of Way Acquisition ......\$0

Construction ......\$1,050,000

TOTAL.....\$1,800,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

The program was originally established in 1999 to address traffic concerns on residential streets. The City Council recently adopted a revised Traffic Calming Program in order to make informed, systematic decisions about actions to correct those concerns. There has been a substantial increase in requests to the City for installation of physical devices within the last couple of years that resulted in a significant increase in the number of speed and volume studies and required numerous public meetings. This program will allow for adequate traffic studies to keep up with the increased demand, support staff resources to perform the studies and work with residents toward resolving traffic concerns, and fund the purchase, installation and construction of physical devices for residential traffic calming.

YEAR:

2014 - 2019

PROJECT #36:

**Traffic Signal Management Program** 

Ongoing Citywide Program

**DESCRIPTION:** 

This program will analyze intersections for potential installation of traffic signals or other traffic control to insure safe and efficient use of the existing and planned transportation network. Analysis of turn movements and collision history will be

used to prioritize new traffic signal installations.

PROJECT COST:

Preliminary Engineering ......\$600,000

Right of Way Acquisition .....\$0

Construction ......\$3,600,000

TOTAL.....\$4,200,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

**JUSTIFICATION:** 

Historically, the City justifies the need for two new traffic signals per year to meet safety and mobility needs. This program budgets for projects needed to meet the increasing demand for signalized intersection control and the constant need for traffic counts to monitor vehicle volumes and behavior. It also supports the replacement of old, outdated traffic signal equipment at currently signalized intersections. The priorities for traffic signals will be set by transportation system signal warrant studies which include studies of volumes, collision history, pedestrian mobility needs, and roadway geometry. This program also helps the City maintain level of service standards necessary to maintain concurrency as required by the Growth Management Act.

YEAR:

2014 - 2019

PROJECT #37:

**Miscellaneous Intersection Improvements** 

Ongoing Citywide Program

**DESCRIPTION:** 

Improve miscellaneous intersections within the City to accommodate future traffic volumes. Provides for improvements to the operational efficiency of the roadway system including rechannelization, signing, signal coordination programs, transit signal priority, Intelligent Transportation Systems, signal upgrades such as protective/permissive phasing and LED signal indications

upgrades.

**PROJECT COST:** 

Preliminary Engineering .....\$45,000

Right of Way Acquisition .....\$0

Construction ......\$255,000

TOTAL....\$300,000

**FUNDING SOURCE(S):** City of Kent

#### **PROJECT**

JUSTIFICATION:

The Transportation Master Plan identified several intersections that will need to be improved to accommodate future traffic volumes. These intersections are spread throughout the City and are not included as separate projects within this 6-Year TIP. Increasing the capacity and efficiency of the existing roadway system through operational improvements is a very cost effective element of the transportation program.

YEAR:

2014 - 2019

PROJECT #38:

**Comprehensive Plan Update** 

Ongoing Citywide Program

**DESCRIPTION:** 

This project consists of an update of the Transportation Element of the City's Comprehensive Plan and the Transportation Master Plan including near-term and long range planning of the City's transportation system needs. Project costs include consultant contracts for transportation planning, concurrency management, public involvement, travel demand and traffic operations modeling and analysis of potential financing strategies to construct, operate and maintain the City's transportation network. The project includes staff resources, hardware and software to analyze, manage and monitor the transportation network.

PROJECT COST:

Preliminary Engineering ......\$450,000

Right of Way Acquisition .....\$0

Construction ......\$0

TOTAL.....\$450,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

The City's 2008 Transportation Master Plan identified the City's transportation system needs out to the year 2030 but was based on the City's 2004 Comprehensive Plan. This project will support the City's 2014-2015 Comprehensive Plan Update by incorporating the City's updated household and jobs forecasts into future transportation demand model forecast scenarios and develop possible transportation alternatives to accommodate the new growth projections. The City must be in compliance with all state, county and regional policies in order to be eligible to apply for competitive grants. The City endeavors to maximize transportation efficiency, investigate methods of measuring concurrency that incorporate all modes of travel, better reflects the ways our community is changing, engages the community in discussions about future transportation investments, and investigates various ways of funding our future transportation needs.

YEAR:

2014 - 2019

PROJECT #39:

**Channelization (Street Markings) Improvement Program** 

Ongoing Citywide Program

**DESCRIPTION:** 

Provide street marking projects throughout the City to separate and regulate

conflicting movements, define paths of travel, and facilitate safe and orderly

movement on City Streets.

**PROJECT COST:** 

Preliminary Engineering .....\$50,000

Right of Way Acquisition .....\$0

Construction ......\$640.000

TOTAL.....\$690,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

This ongoing program maintains and updates the channelization throughout the City. The City has 1,648,863 linear feet (LF) of channelization striping, 445,300 raised pavement markings, 22,012 LF of C curb and 7,179 LF of painted C curb. Channelization helps to limit conflict points and directs motorists through areas of complexity. These markings are also used to delineate left turn storage queue areas and deceleration areas for right turning vehicles. This project preserves the capacity and efficiency of the existing roadway system.

YEAR:

2014 - 2019

PROJECT #40:

**Bicycle System Improvements** 

Ongoing Citywide Program

**DESCRIPTION:** 

Make miscellaneous improvements to the city's bicycle routes as identified in the Nonmotorized Chapter (Chapter 6) of the adopted 2008 Transportation Master Plan (TMP) and the full 2007 Nonmotorized sub-plan. Bicycle lanes are usually part of individual street improvement projects and each of those projects would be itemized individually. The costs of the bike lanes added to TMP Street projects, estimated at approximately \$40,000,000 in 2007 dollars, are not reflected here. This project is for shared lane striping and signing, matching grant dollars for filling in bike lane gaps, and for the extension of the shared-use path network.

**PROJECT COST:** 

Preliminary Engineering .....\$100,000

Right of Way Acquisition .....\$75,000

Construction ......\$730,000

TOTAL.....\$905,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

JUSTIFICATION:

The 2008 Transportation Master Plan and the 2007 Nonmotorized System Study proposed a network of shared lane routes on transportation corridors throughout the city to help connect the bicycle system. Lane markings and sign postings can inform motorists and cyclists of those corridors best suited for significant bike use. These shared-lane facilities can provide critical linkages to major cycling activity centers and connections to the shared use path systems. The city has a prioritized list of projects for bike lanes, sharrows, and shared use paths. This project can help achieve the City's goals for improving mobility, reducing vehicle trips, increasing physical exercise, and improving transportation connectedness.

YEAR:

2014 - 2019

PROJECT #41:

Sidewalks, Sidewalk Repair and the Americans with Disabilities Act

Compliance Program
Ongoing Citywide Program

**DESCRIPTION:** 

Systematically construct new sidewalks throughout the City as identified by prioritized project lists in the 2008 Transportation Master Plan. Reconstruct and repair existing sidewalks and curb ramps and install new truncated domes and hard-surfaced sidewalks to implement the requirements of the Federal Americans with Disabilities Act (ADA) consistent with the findings of the Nonmotorized

Chapter (Chapter 6) of the 2008 Transportation Master Plan.

**PROJECT COST:** 

Preliminary Engineering .....\$500,000

Right of Way Acquisition .....\$250,000

Construction .....\$2,250,000

TOTAL.....\$3,000,000

**FUNDING SOURCE(S):** 

City of Kent

#### **PROJECT**

**JUSTIFICATION:** 

This project is mandated by Title II of the Americans with Disabilities Act. Title II requires that a public entity must evaluate its services, programs, policies, and practices to determine whether they are in compliance with the nondiscrimination requirements of the ADA. The ADA requires that an ADA Transition Plan be prepared to describe any structural or physical changes required to make programs accessible. The City has conducted a self-evaluation and prepared a Transition Plan including a prioritized list of projects to bring itself into compliance with the Federal ADA regulations. This program begins working on that list of projects to construct and repair the City's sidewalk and street/sidewalk transition zones for accessibility for all users and begins to address the pedestrian improvements identified in the Transportation Master Plan. This project can help achieve the City's goals for improving mobility, reducing vehicle trips, increasing physical activity, and improving transportation connectedness.

YEAR:

2014 - 2019

PROJECT #42:

**Guardrail and Safety Improvements** 

Ongoing Citywide Program

**DESCRIPTION:** 

Make miscellaneous guardrail improvements each year to enhance motorist safety. Candidate projects include Frager Road, SE 240<sup>th</sup>/148<sup>th</sup> Avenue Southeast hillside, Lake Fenwick Road north or S 272<sup>nd</sup> Street, and 100<sup>th</sup> Avenue Southeast. Upgrade existing guardrail end-treatments as mandated by State and Federal

regulations.

PROJECT COST: Preliminary Engineering ......\$20,000

Right of Way Acquisition ......\$0

Construction ......\$160,000

TOTAL.....\$180,000

**FUNDING SOURCE(S):** 

City of Kent, HES

**PROJECT** 

JUSTIFICATION:

This project is mandated by compliance with Federal and State regulations and

the requirement to eliminate potentially hazardous roadway conditions.

YEAR:

2014 - 2019

PROJECT #43:

**Community Based Circulating Shuttles** 

Ongoing Citywide Programs

**DESCRIPTION:** 

Continue to provide enhanced transit service to meet the needs of the community through the use of fixed-route shuttle service, with demand-responsive routing capabilities. Routes 914/916 serve the Kent Transit Center, Regional Justice Center, Kent City Hall, Green River Community College's Kent campus, and local shopping and medical facilities. The Route 913 shuttle connects the City's manufacturing/industrial center with the regional bus and commuter train services

at the Kent Transit Center.

**PROJECT COST:** 

Preliminary Engineering ......\$60,000

Implementation ......\$930,000

TOTAL.....\$990,000

**FUNDING SOURCE(S):** 

City of Kent, CMAQ, King County, ITS

#### **PROJECT**

JUSTIFICATION:

Routes 914/916 provide mobility and independence to many of the city's seniors and reduce the need for expensive ACCESS service for many wheelchair-lift service trips. Community circulating shuttles encourage the participation of all ages, all economic groups, all physical abilities, and virtually all of our community in everyday civic life without the isolation and pollution of the automobile for every trip. Commuter shuttles enhance the regional transit/train service by providing the vital link from home or work to the Transit Center, encouraging people to travel without their personal vehicles – thus avoiding the cold-start impacts to air quality and reducing congestion on local streets.

YEAR:

2014 - 2019

PROJECT #44:

Railroad Quiet Zone for Downtown Urban Center

Ongoing Citywide Program

**DESCRIPTION:** 

Establishment of a railroad quiet zone for the Burlington Northern Santa Fe Railway (BNSF) tracks and the Union Pacific Railroad (UPRR) tracks through the City of Kent. The grade crossings to be included in the quiet zone on the BNSF railroad mainline are: S 259th Street, Willis Street, Titus Street, Gowe Street, Meeker Street, Smith Street, James Street, and S 212th Street. The grade crossings included in the quiet zone for the UPRR mainline tracks are: Willis Street (SR 516), W Smith Street, W Meeker Street, W James Street, S 228th

Street, and S 212<sup>th</sup> Street.

**PROJECT COST:** 

Preliminary Engineering ......\$3,500,000

Right of Way Acquisition .....\$0

Construction .....\$0

TOTAL.....\$3,500,000

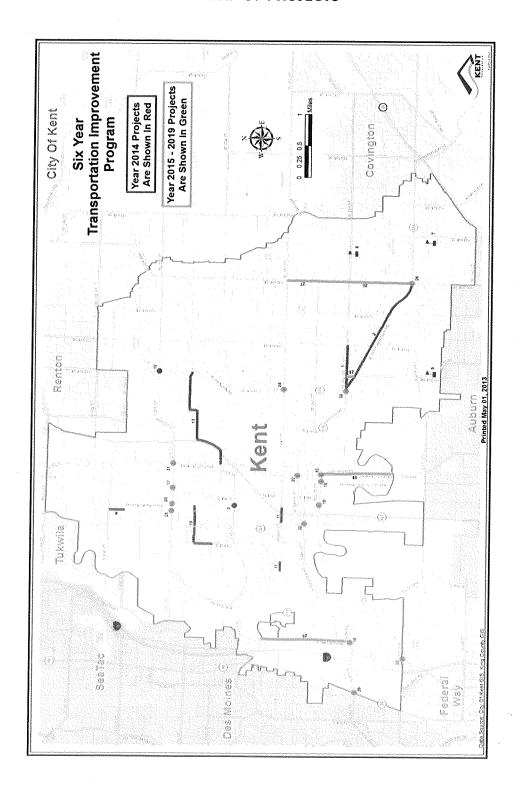
**FUNDING SOURCE(S):** 

City of Kent, Federal Rail Administration, FHWA

#### **PROJECT**

JUSTIFICATION: Locomotive engineers begin sounding the train-mounted horn approximately 1/4 mile from the intersection of a highway/railroad crossing. This warning device is an effective deterrent to accidents at grade crossings but exposes the local community to significant levels of noise that often deprecates the quality of life for those living closest to the railroad facilities.

## **MAP OF PROJECTS**



## CITY OF KENT, WASHINGTON

# SIX-YEAR TRANSPORTATION IMPROVEMENT PROGRAM

2014 - 2019



For more information or additional copies of this document contact:

Steve Mullen, Transportation Engineering Manager City of Kent, Public Works, Engineering 220 Fourth Avenue South Kent, WA 98032-5895 (253) 856-5585 smullen@kentwa.gov